

**THE STUDY OF ROAD IMPROVEMENT  
BETWEEN SANTA BARBARA AND BELLA VISTA  
IN  
THE REPUBLIC OF BOLIVIA**

**FINAL REPORT  
DRAWINGS**

MARCH 1991

**JAPAN INTERNATIONAL COOPERATION AGENCY**



THE STUDY OF ROAD IMPROVEMENT BETWEEN SANTA BARBARA  
FINAL REPORT  
DRAWINGS  
MARCH 1991

SSF  
~~SR(8)~~  
91-027(4/4)

LIBRARY

JICA LIBRARY



1090158(5)

22290

**THE STUDY OF ROAD IMPROVEMENT  
BETWEEN SANTA BARBARA AND BELLA VISTA  
IN  
THE REPUBLIC OF BOLIVIA**

**FINAL REPORT**

**DRAWINGS**

**MARCH 1991**

**JAPAN INTERNATIONAL COOPERATION AGENCY**



国際協力事業団

22290

## CONTENTS

### I. PRELIMINARY DESIGN

1. KEY PLAN, GENERAL LEGEND .....	1
2. PLANS, PROFILES .....	2 ~ 37
3. TYPICAL CROSS SECTIONS .....	38 ~ 39
4. DRAINAGES .....	40
5. RETAINING WALLS .....	41
6. BRIDGES .....	42 ~ 54
7. TUNNELS .....	55
8. DISASTER PREVENTIONS .....	56 ~ 58

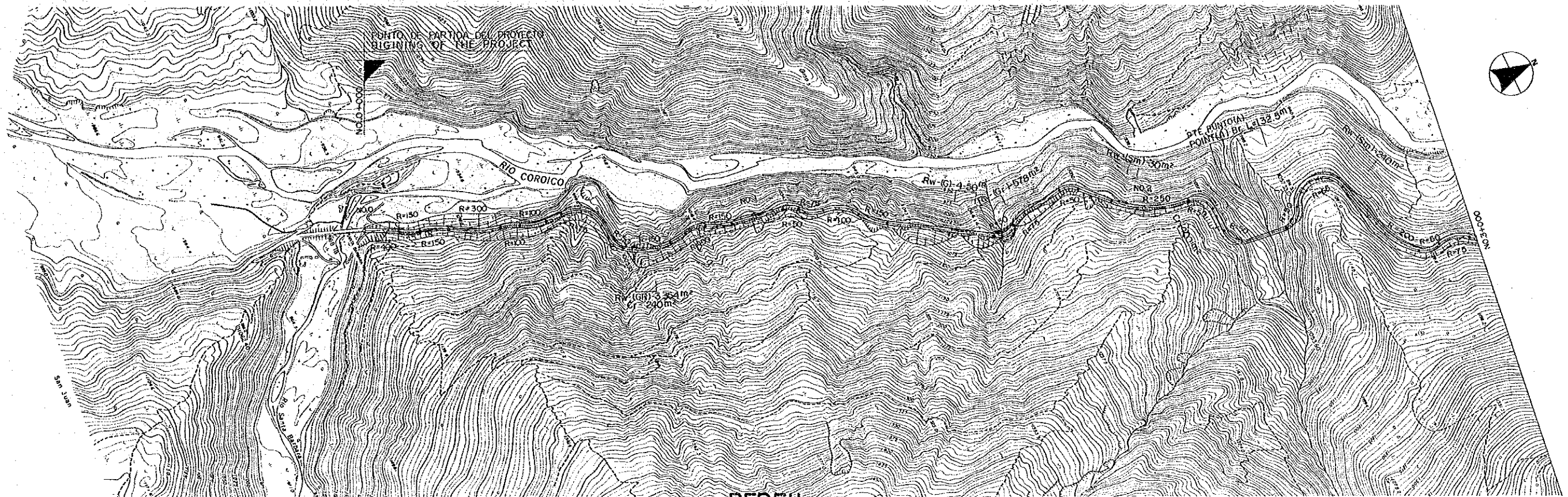
### II. GEOLOGICAL CONDITIONS

1. GEOLOGICAL MAPS .....	59 ~ 67
2. GEOLOGICAL PROFILES .....	68 ~ 72
3. GEOLOGICAL CROSS SECTIONS .....	73 ~ 77

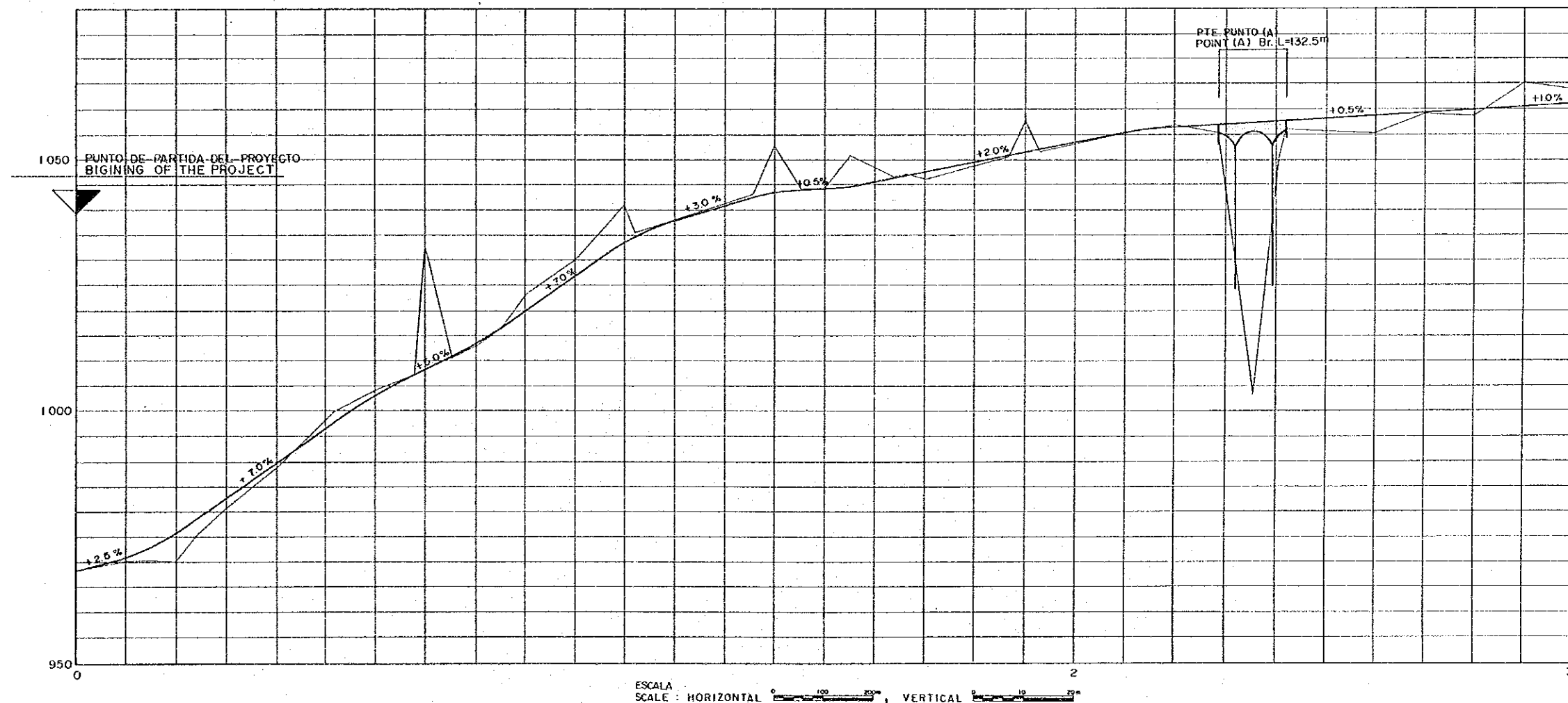
## **I PRELIMINARY DESIGN**



### PLANTA PLAN (1)



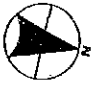
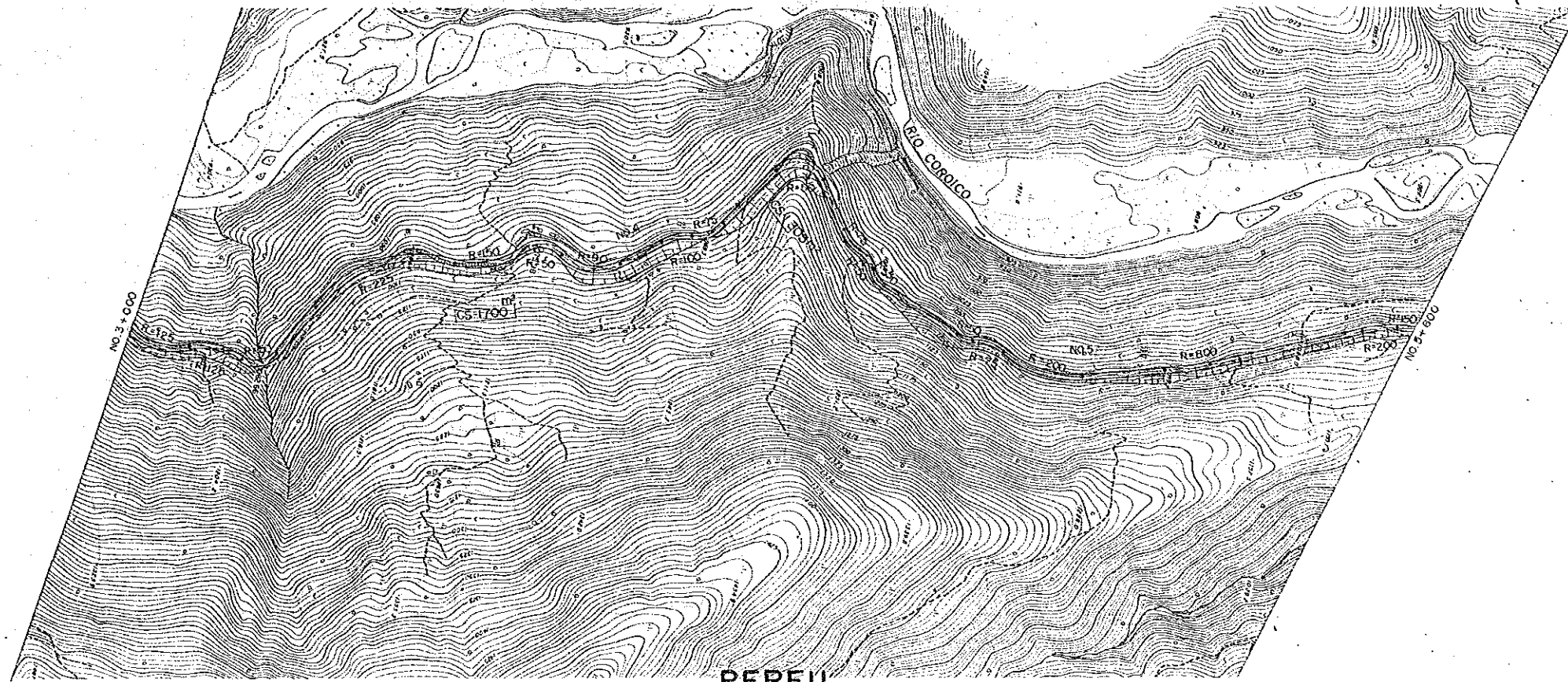
### PERFIL PROFILE



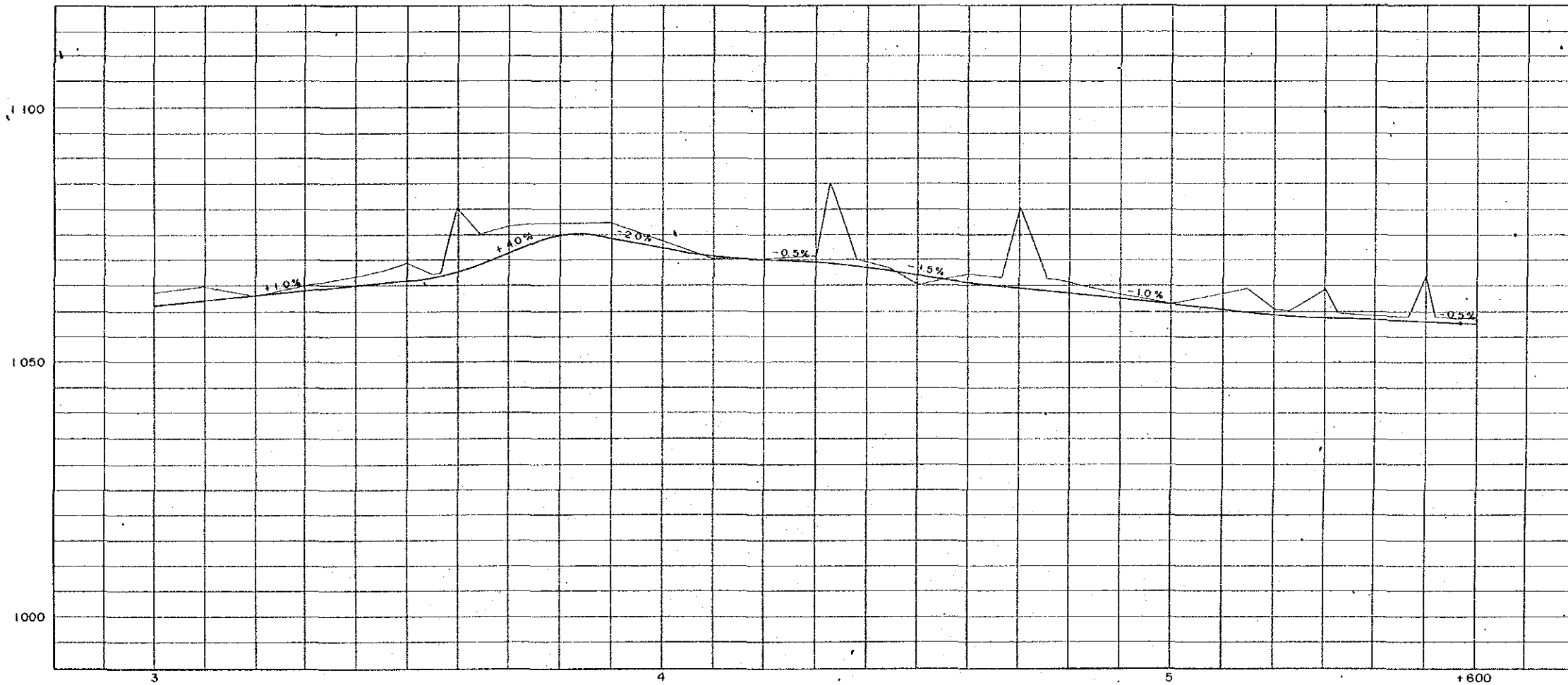
ESCALA  
SCALE: HORIZONTAL  $\frac{1}{50}$ , VERTICAL  $\frac{1}{10}$



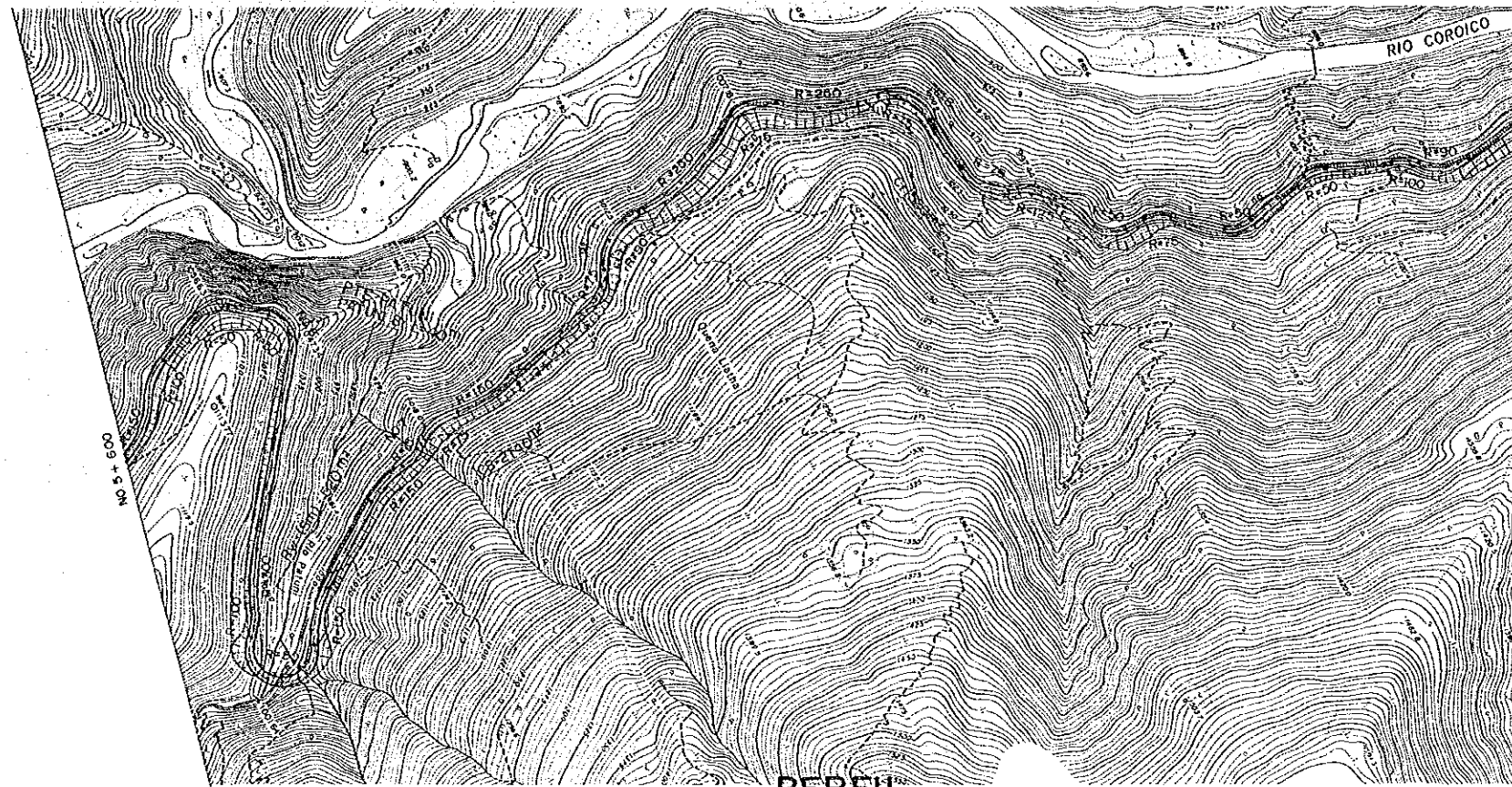
### PLANTA PLAN (2)



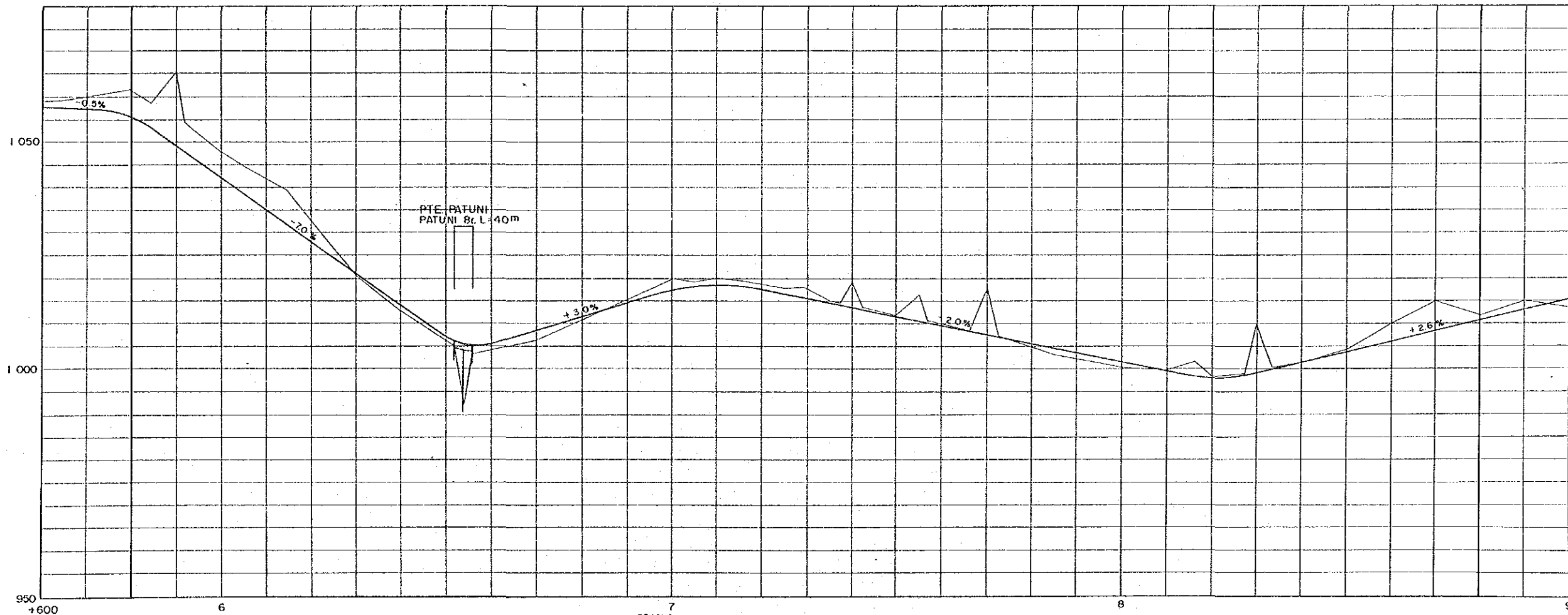
### PERFIL PROFILE



ESCALA  
SCALE: HORIZONTAL 1:2500, VERTICAL 1:25

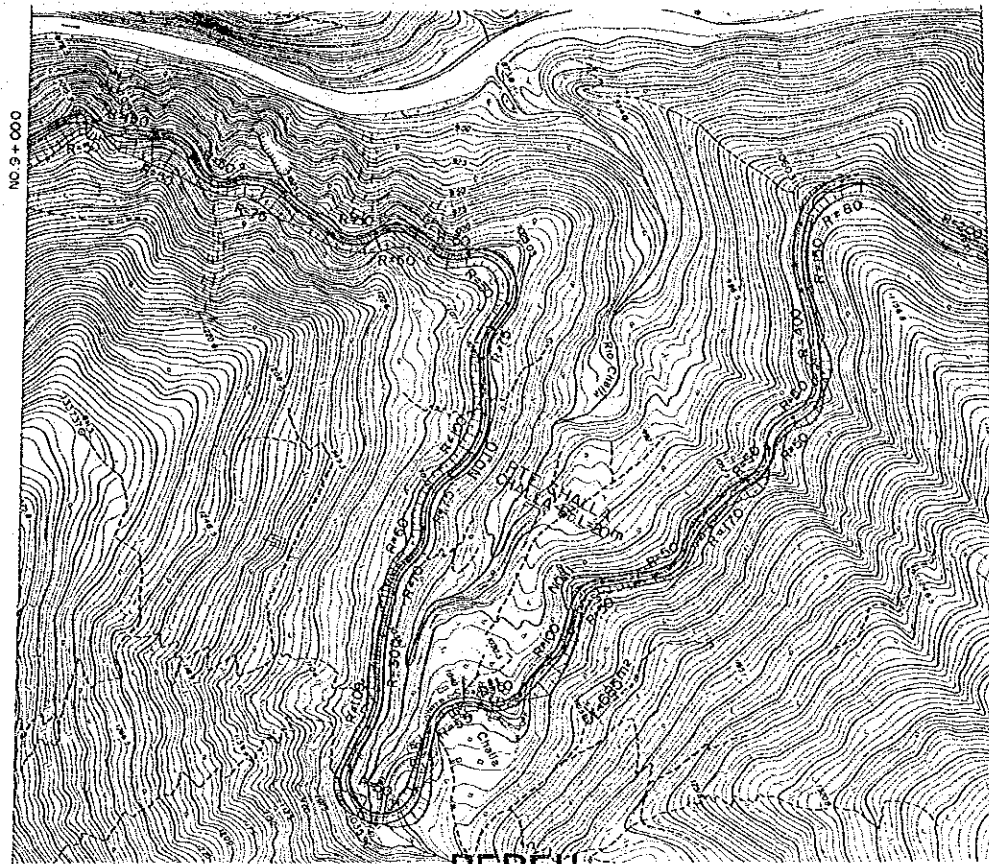


PERFIL  
PROFILE

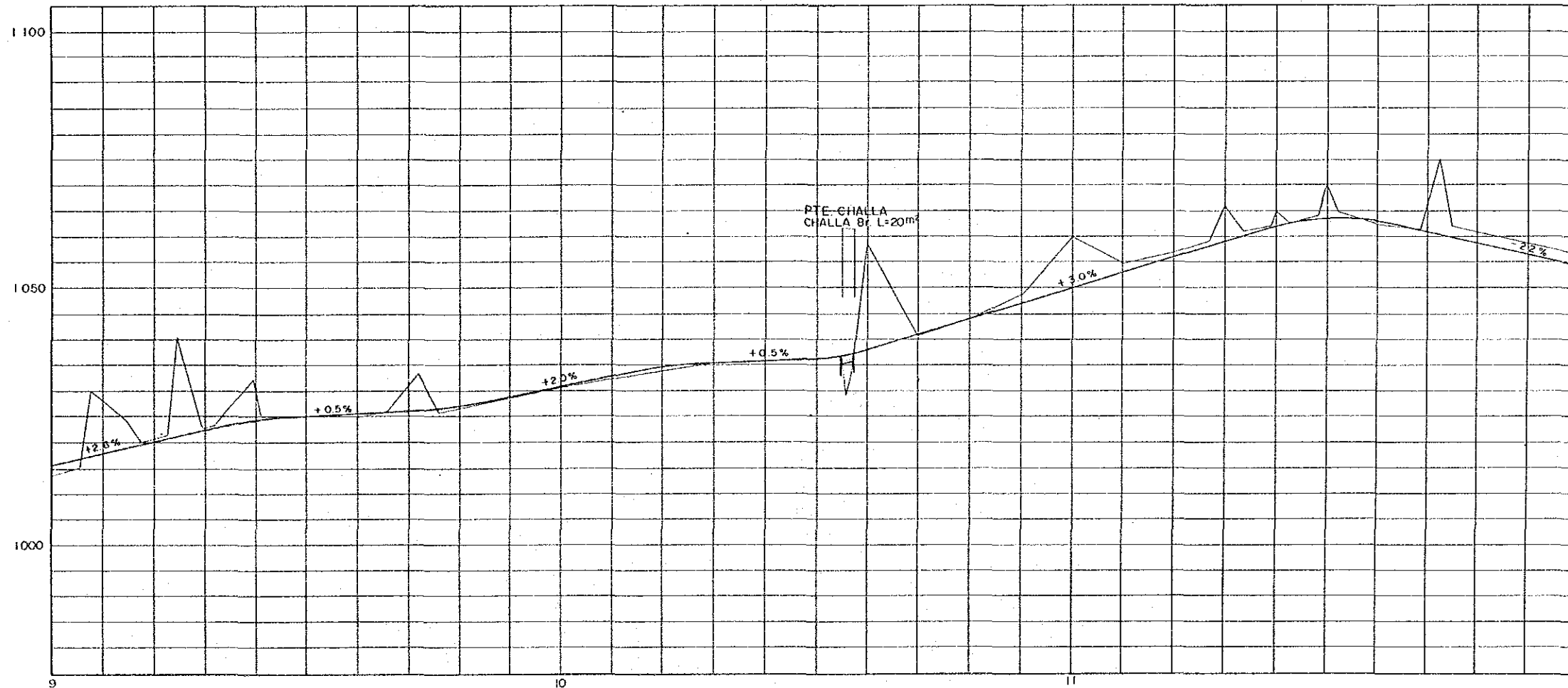


ESCALA  
SCALE: HORIZONTAL 1:1000, VERTICAL 1:20

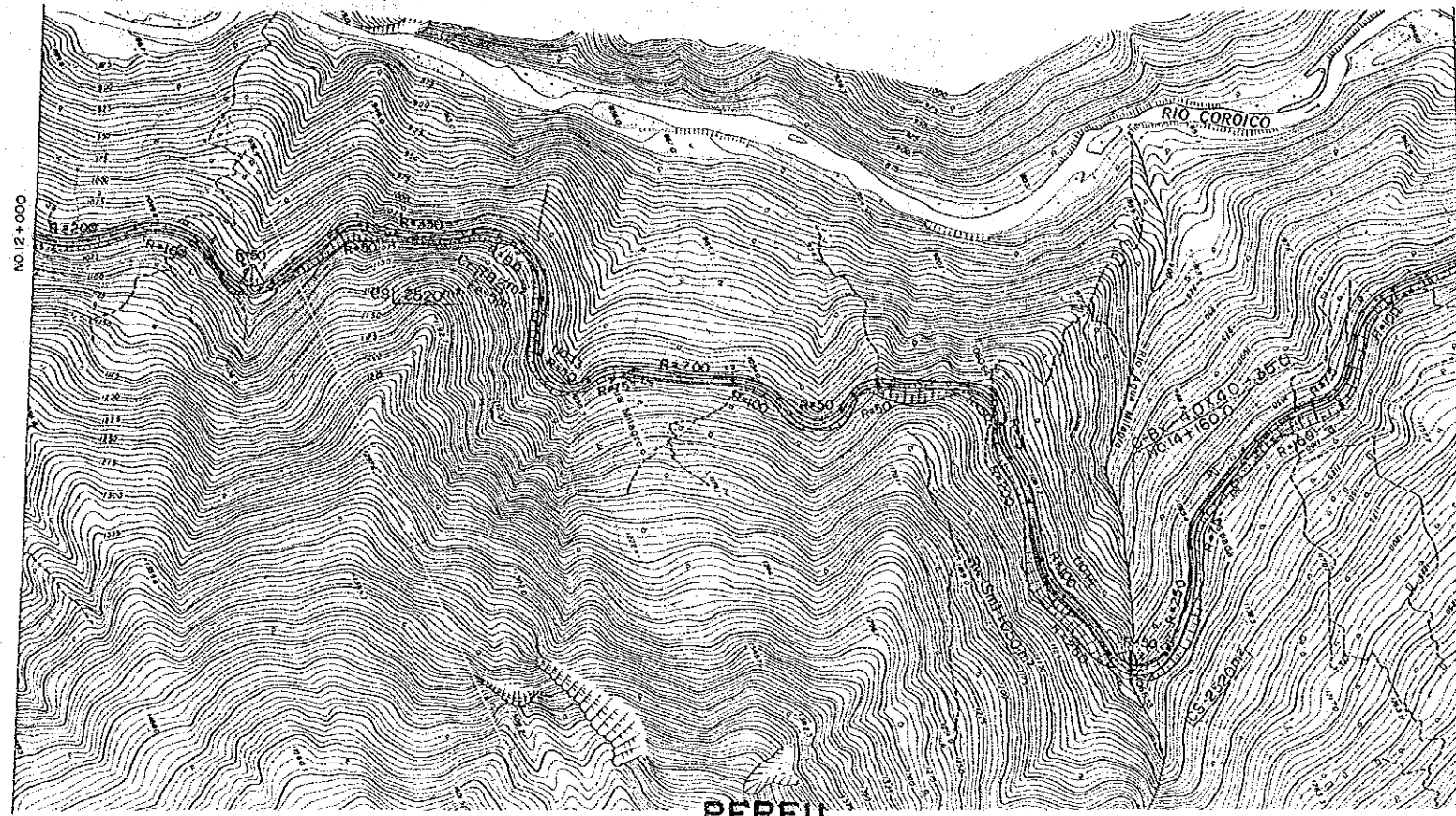
### PLANTA PLAN (4)



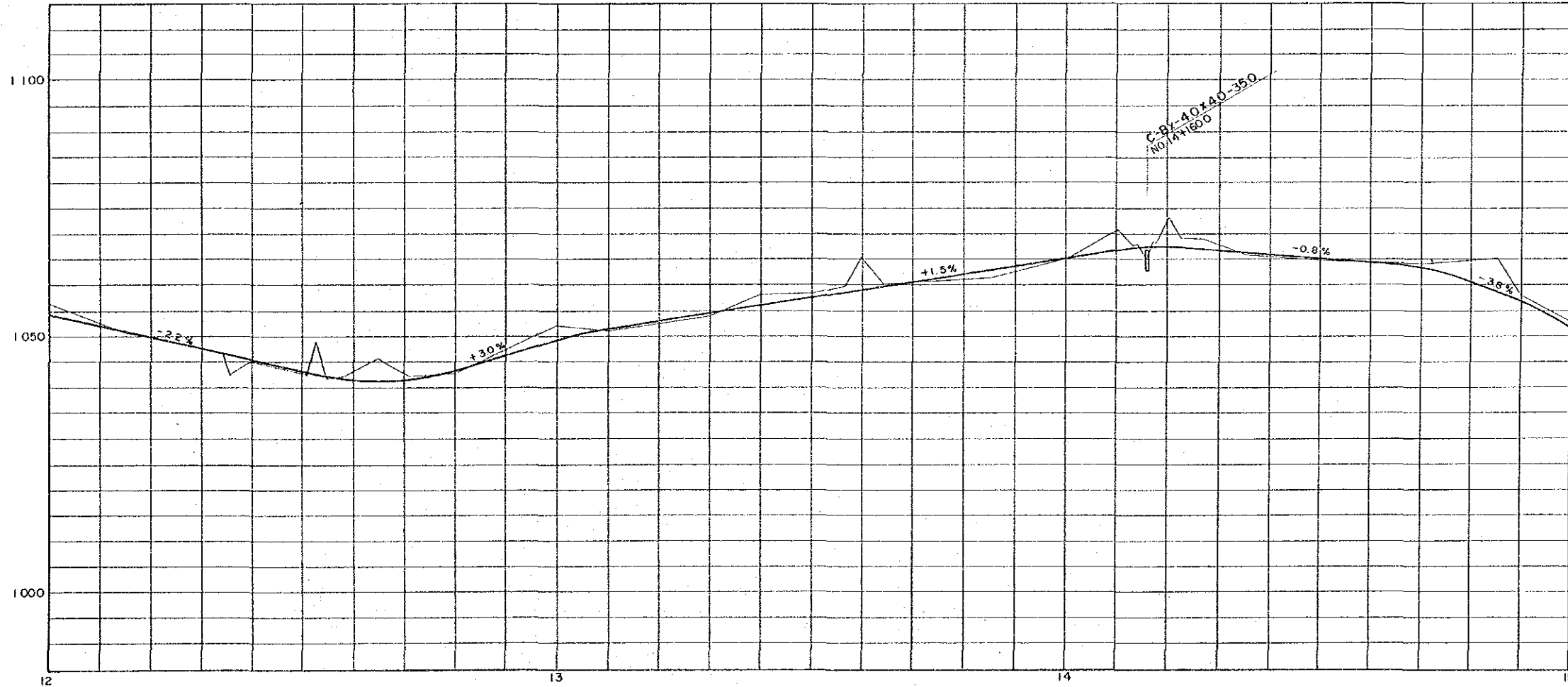
PERFIL  
PROFILE



ESCALA  
SCALE: HORIZONTAL 1:100, VERTICAL 1:25

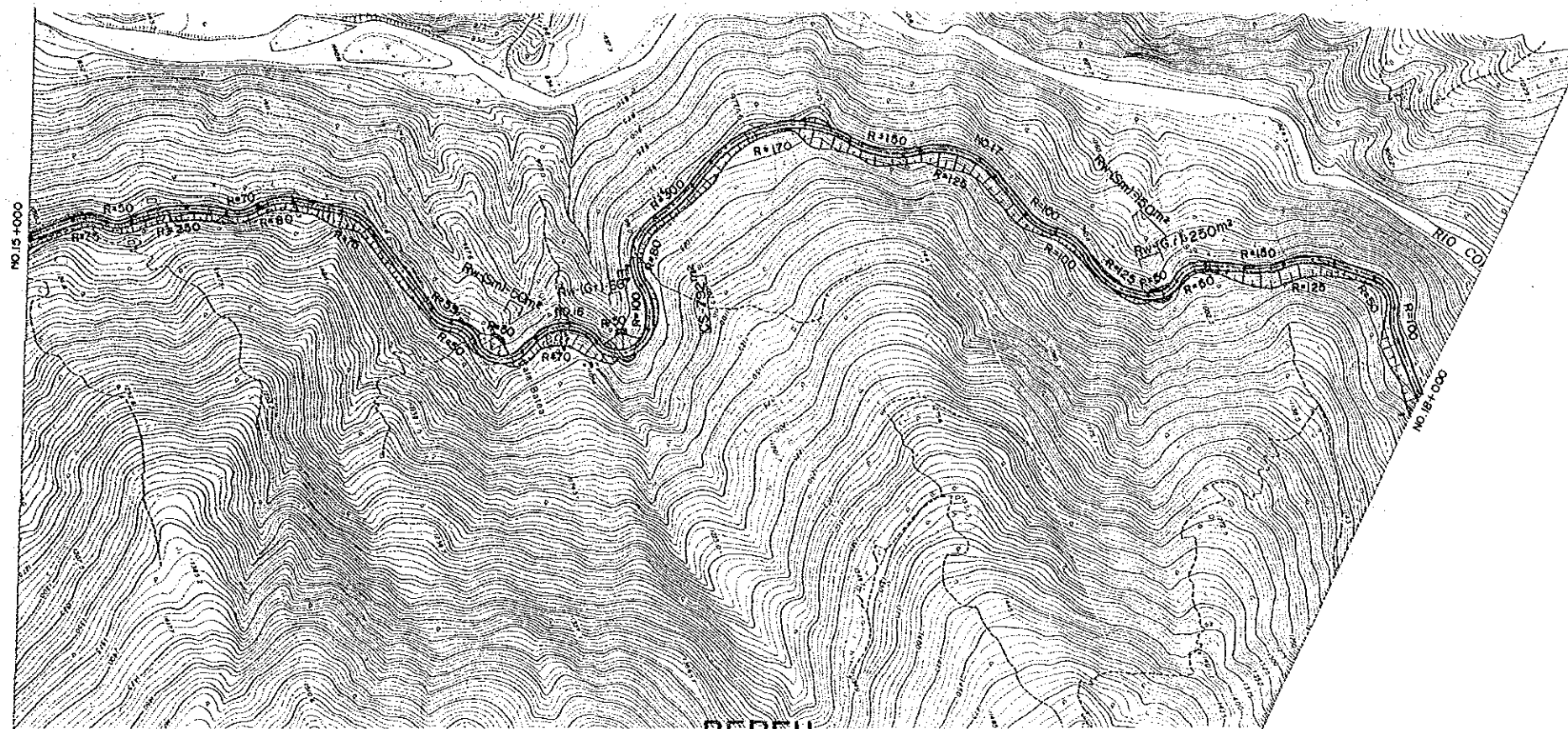


PERFIL  
PROFILE

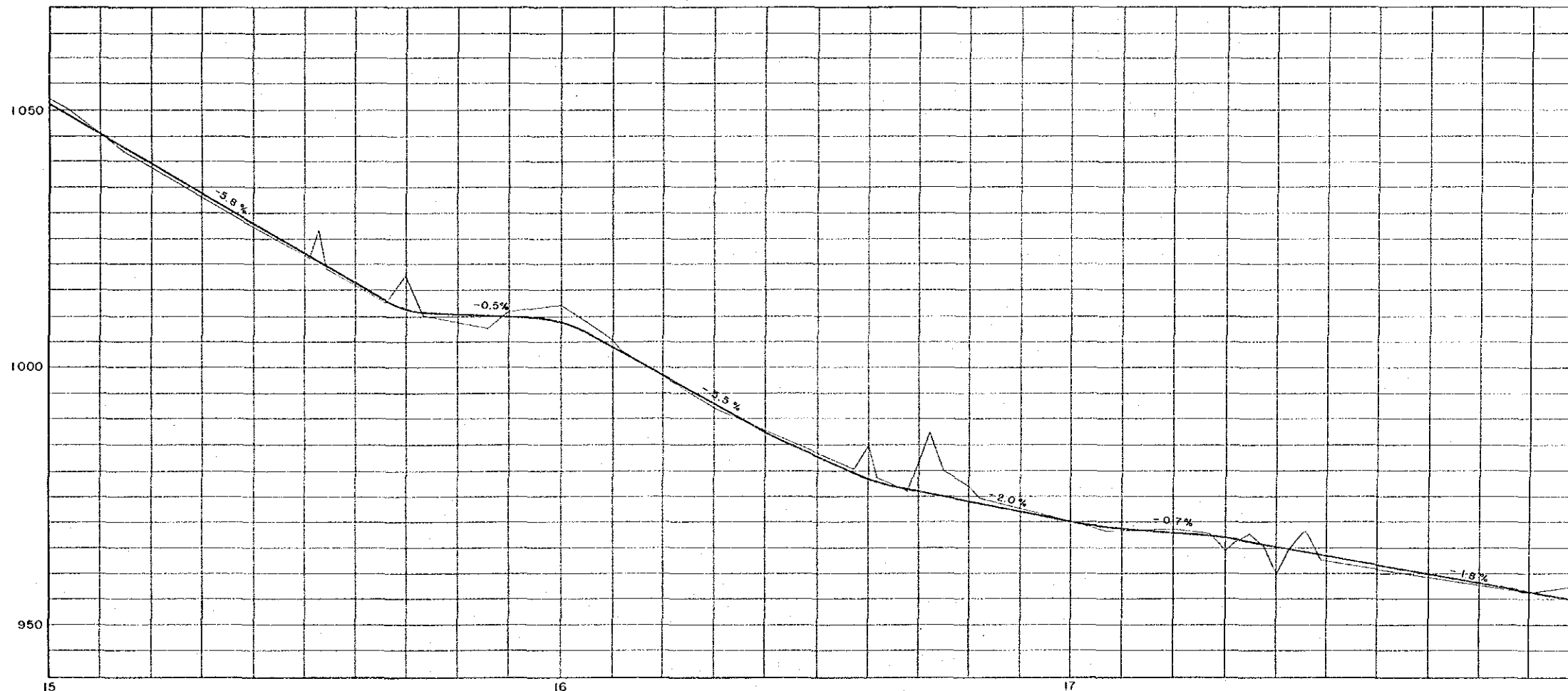


ESCALA  
SCALE : HORIZONTAL 1:1000, VERTICAL 1:100

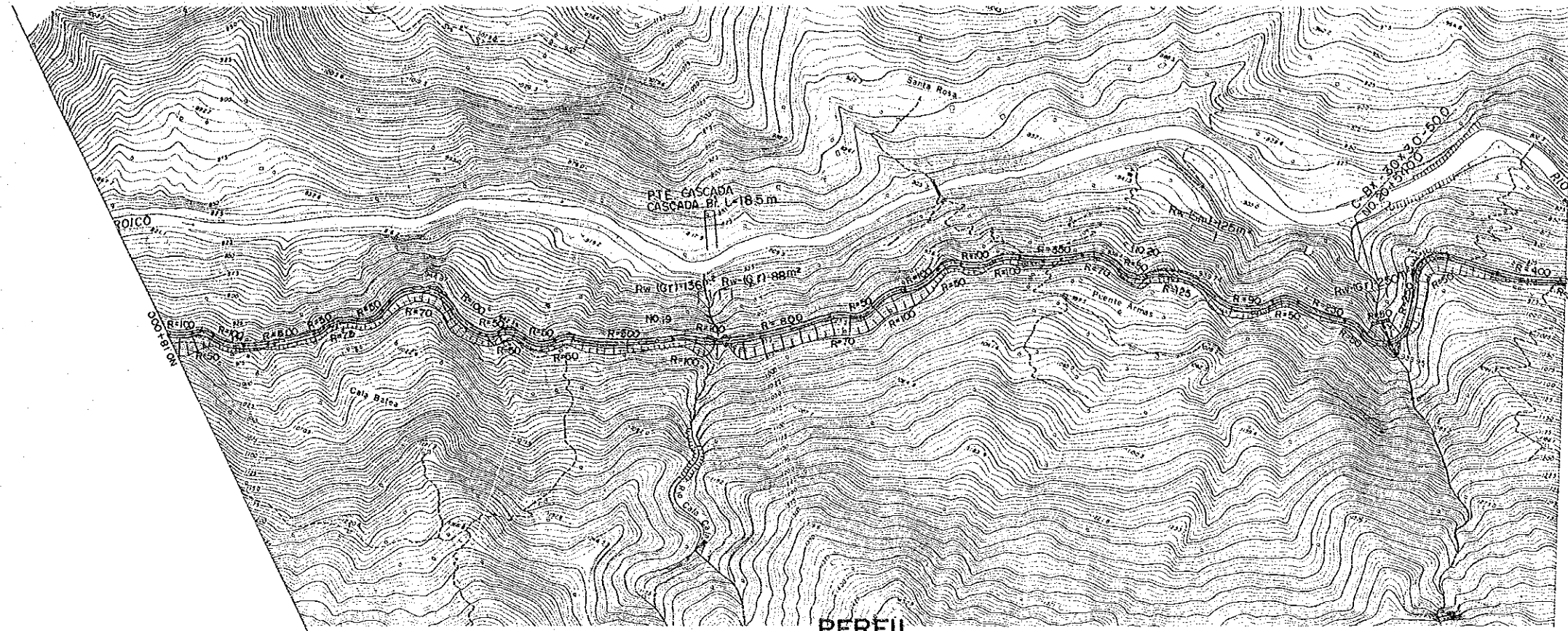
### PLANTA PLAN (6)



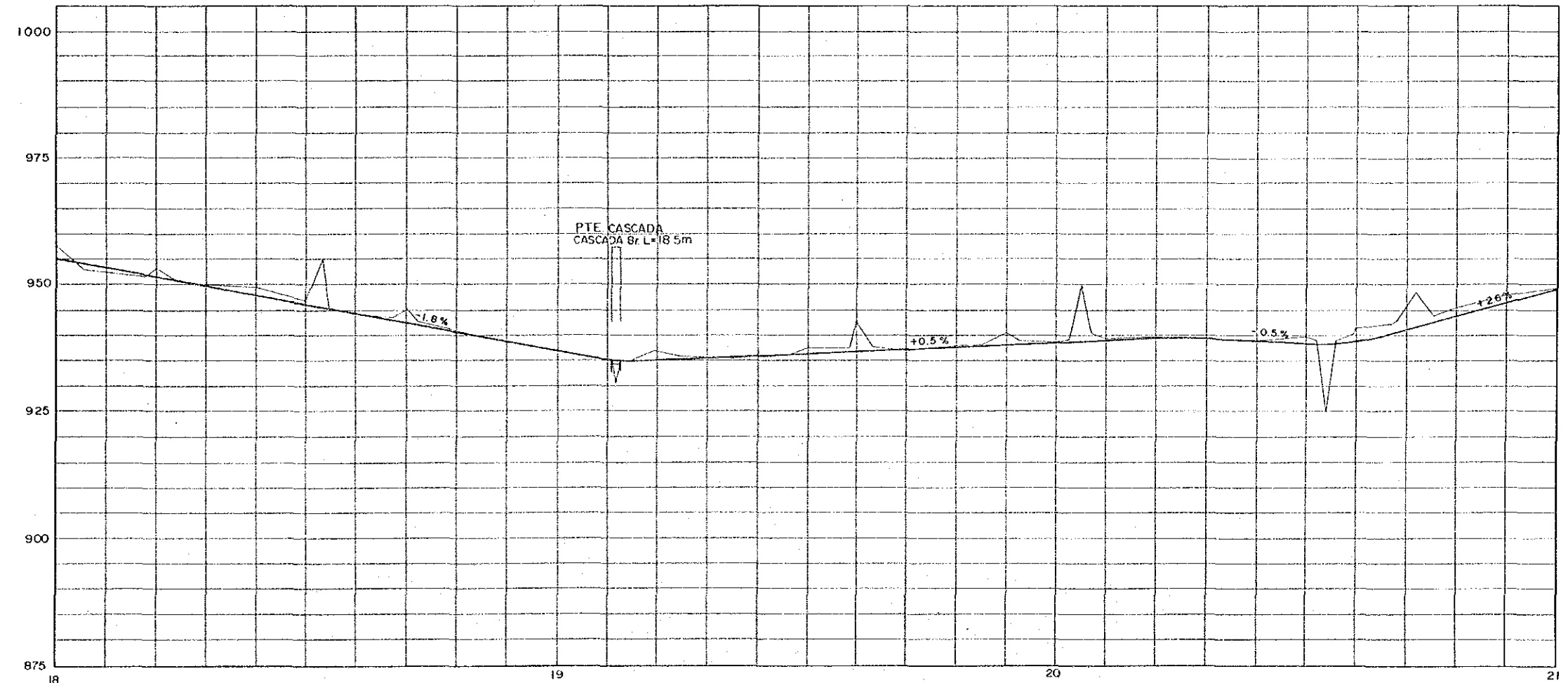
### PERFIL PROFILE



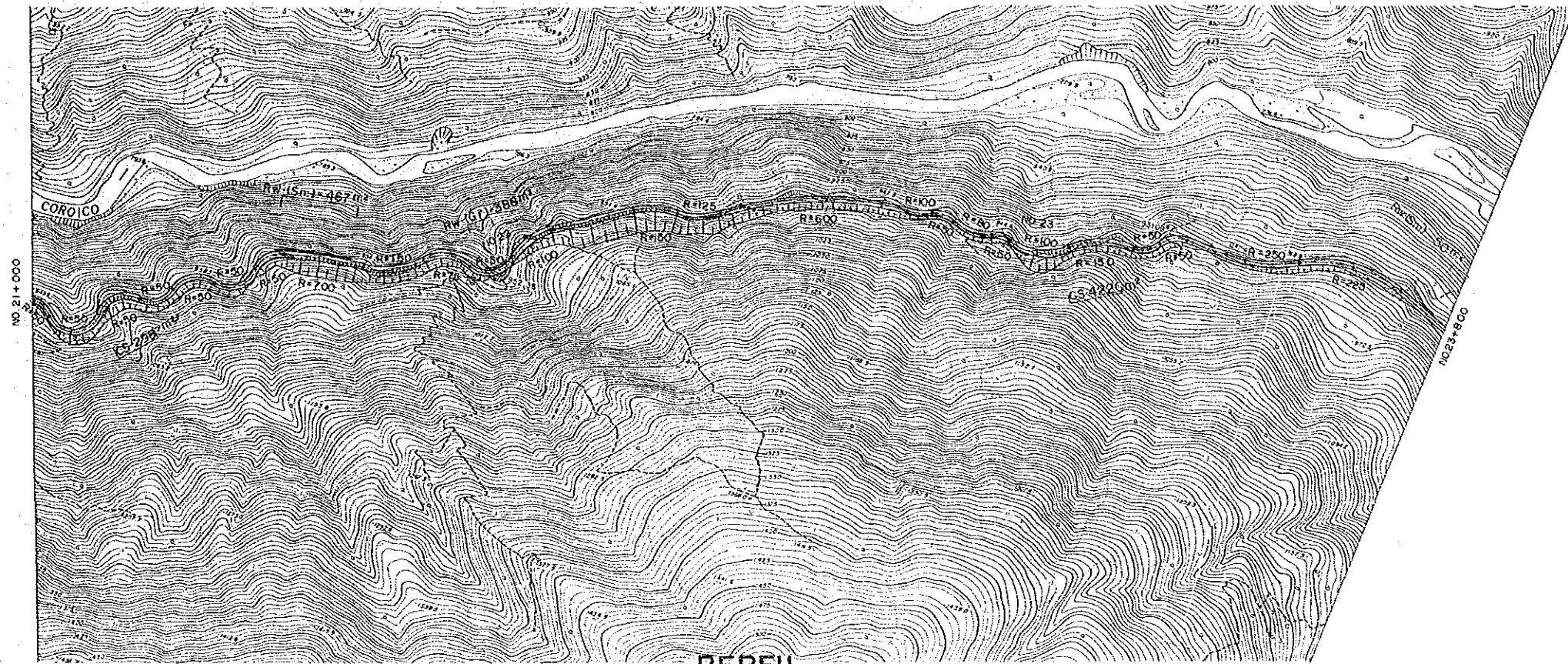
ESCALA  
SCALE: HORIZONTAL 1:100, VERTICAL 1:20



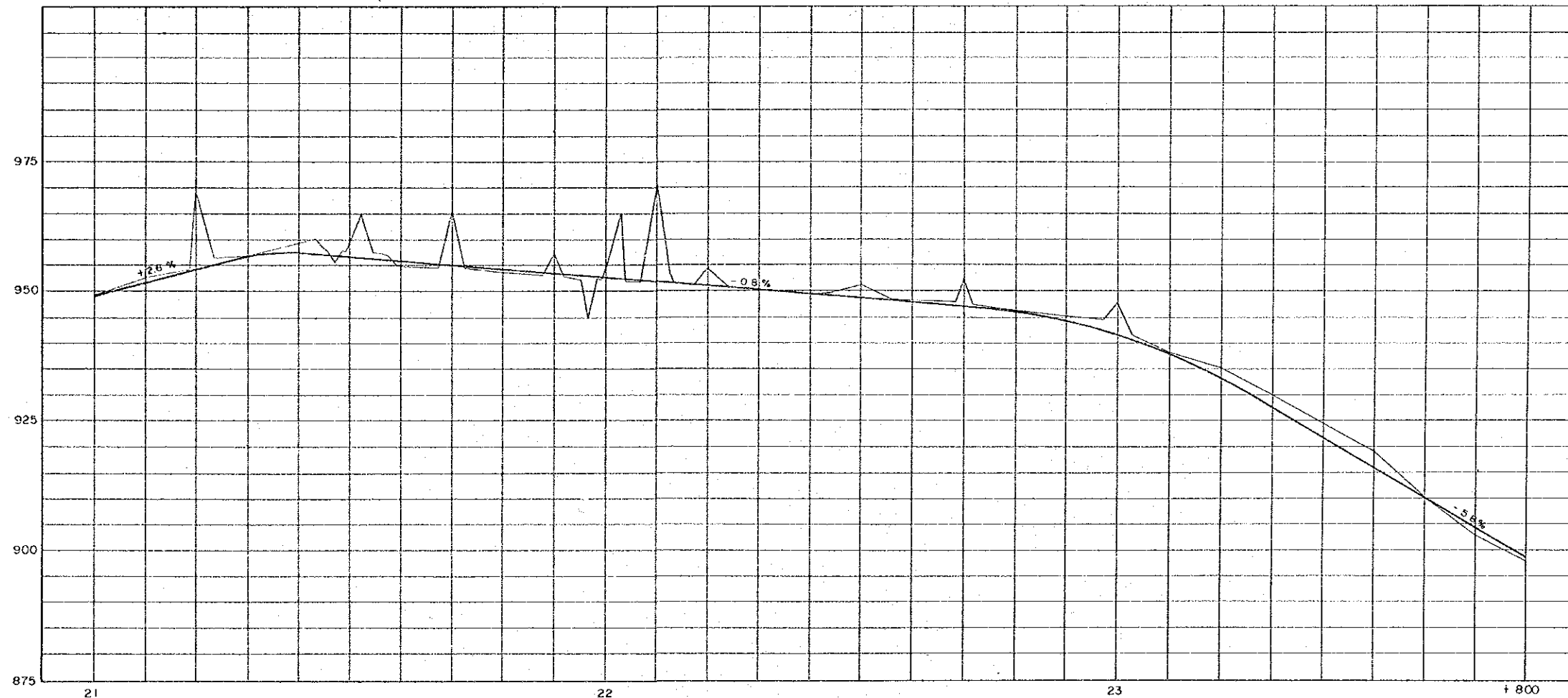
PERFIL  
PROFILE



ESCALA  
SCALE: HORIZONTAL 0 100 200m, VERTICAL 0 10 20m

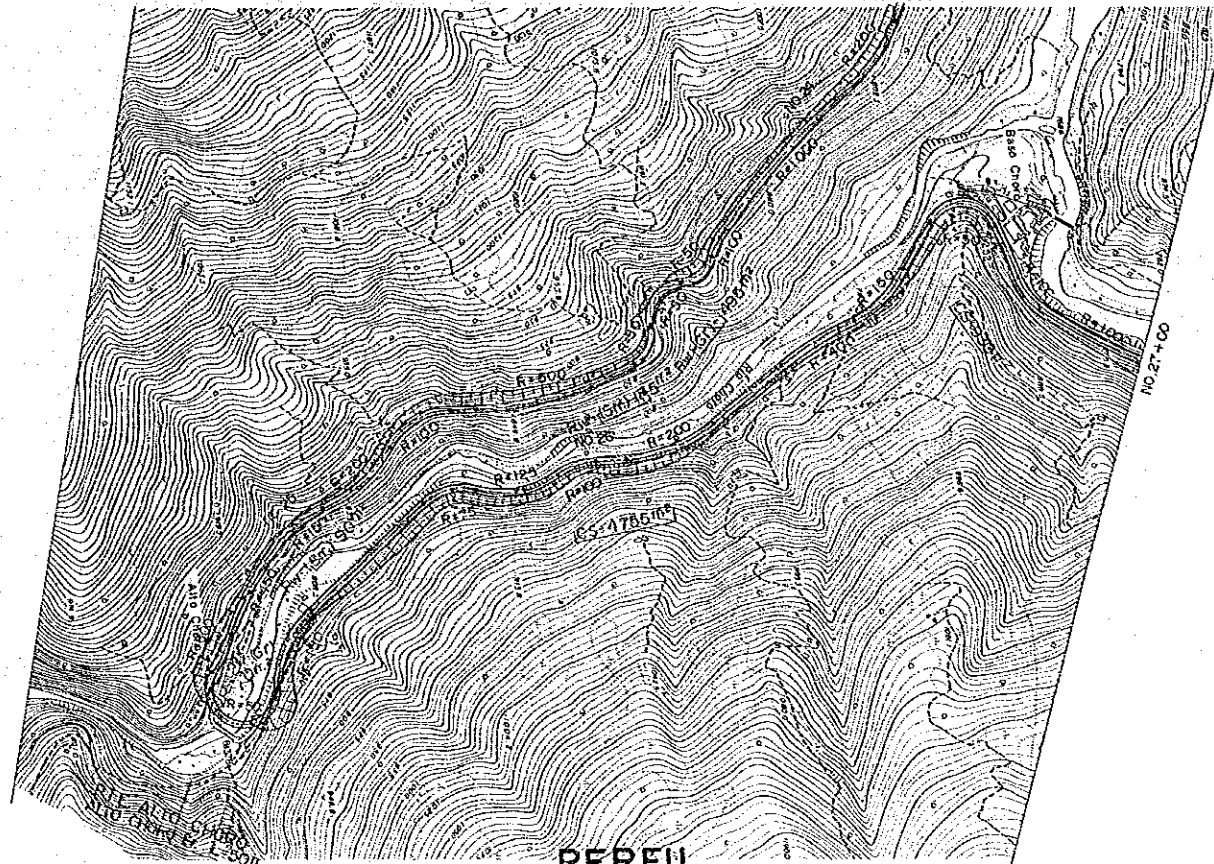


PERFIL  
PROFILE

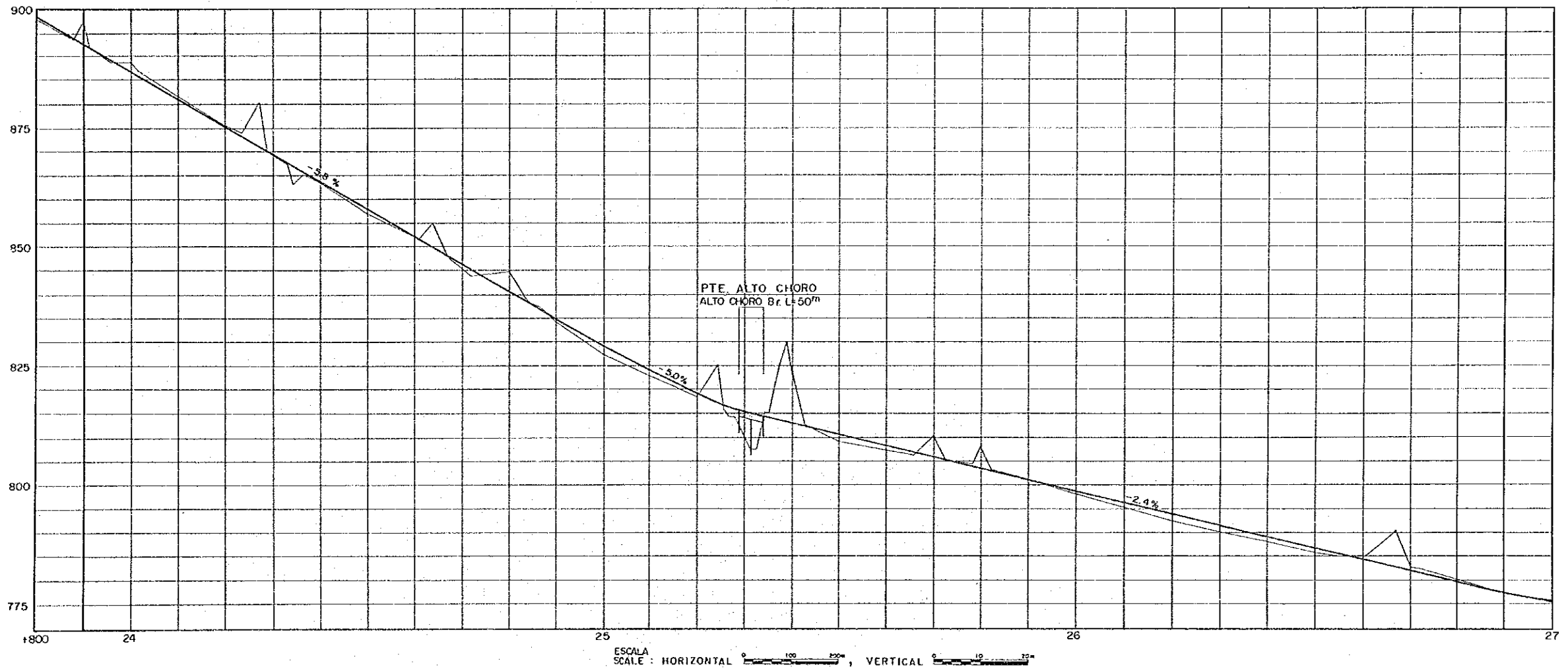


ESCALA  
SCALE: HORIZONTAL 1:100, VERTICAL 1:20

### PLANTA PLAN (9)

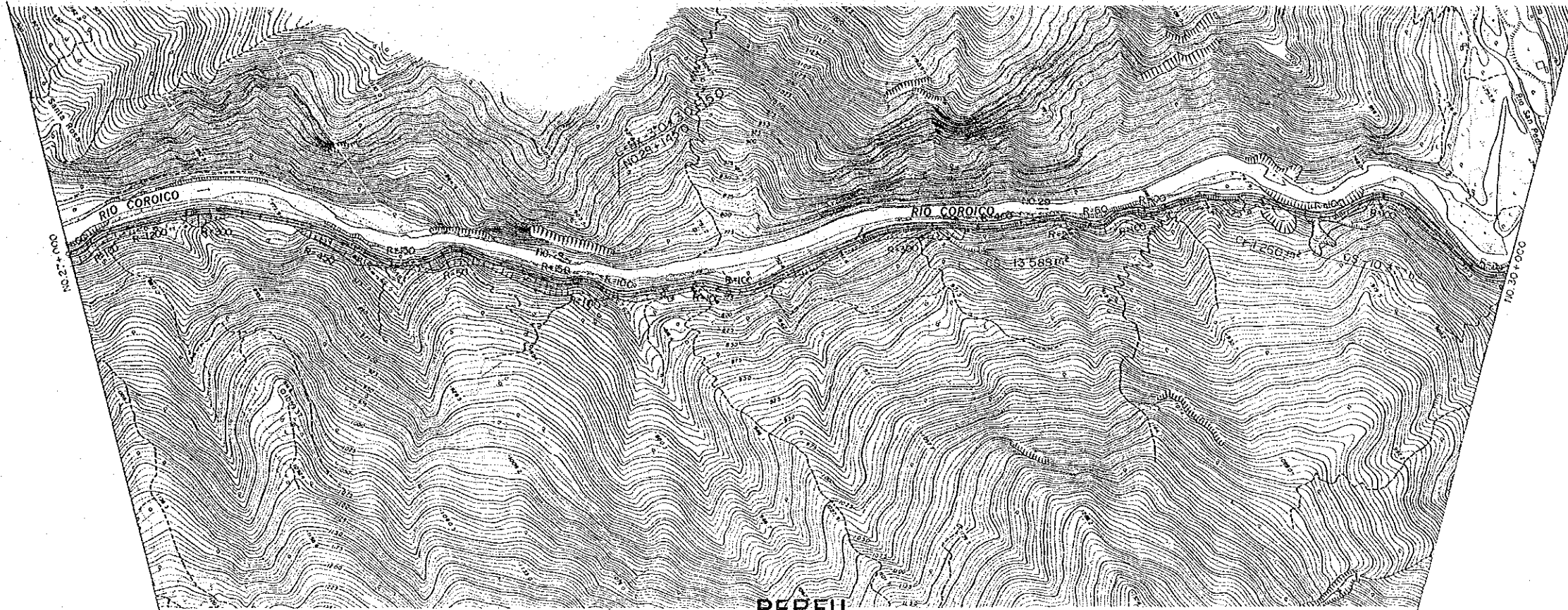


### PERFIL PROFILE

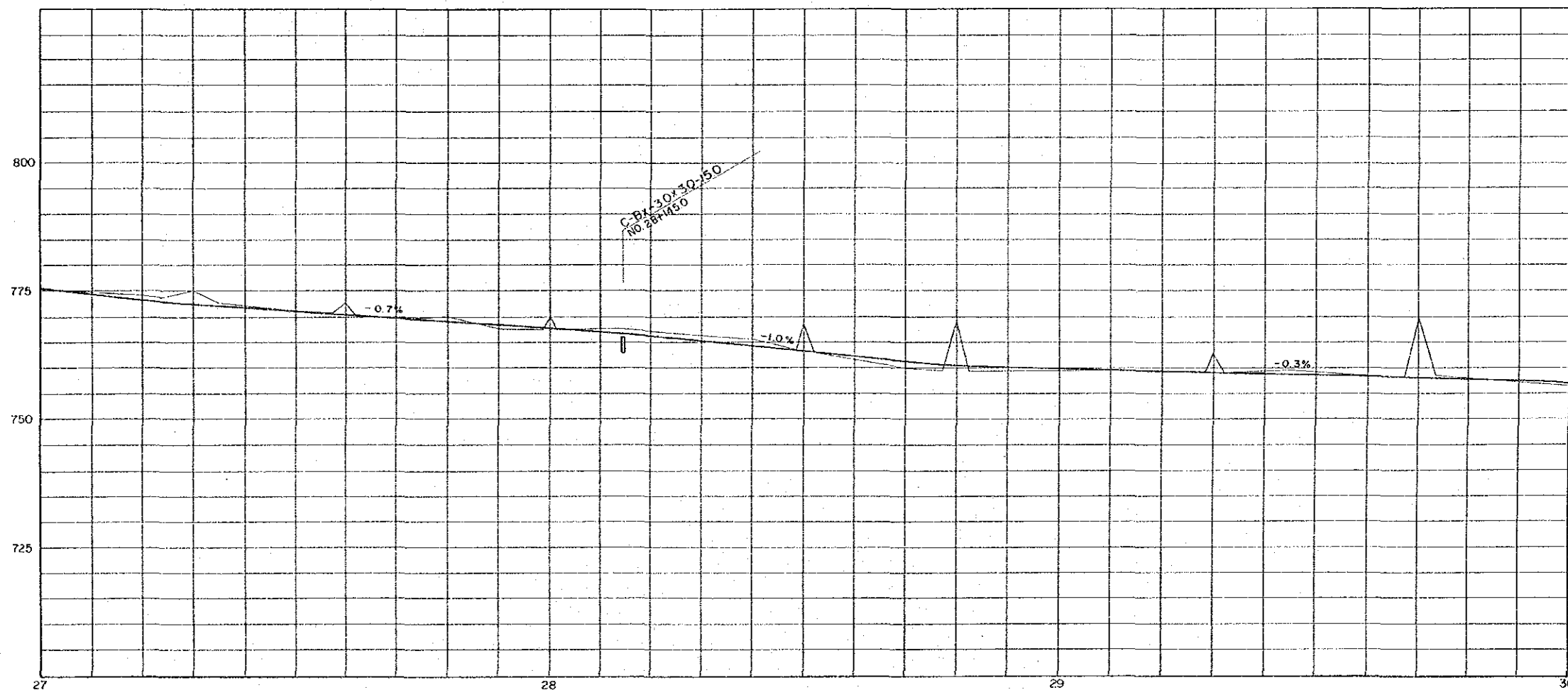




# PLANTA PLAN (10)

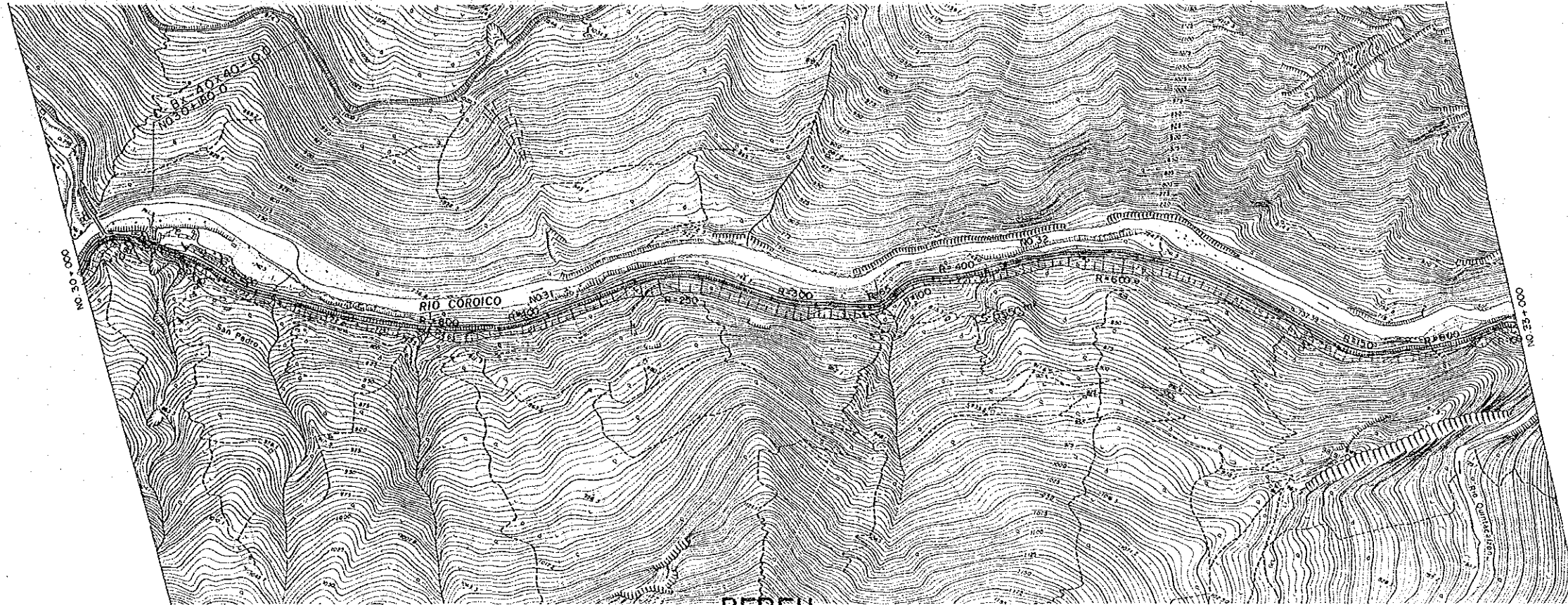


PERFIL  
PROFILE

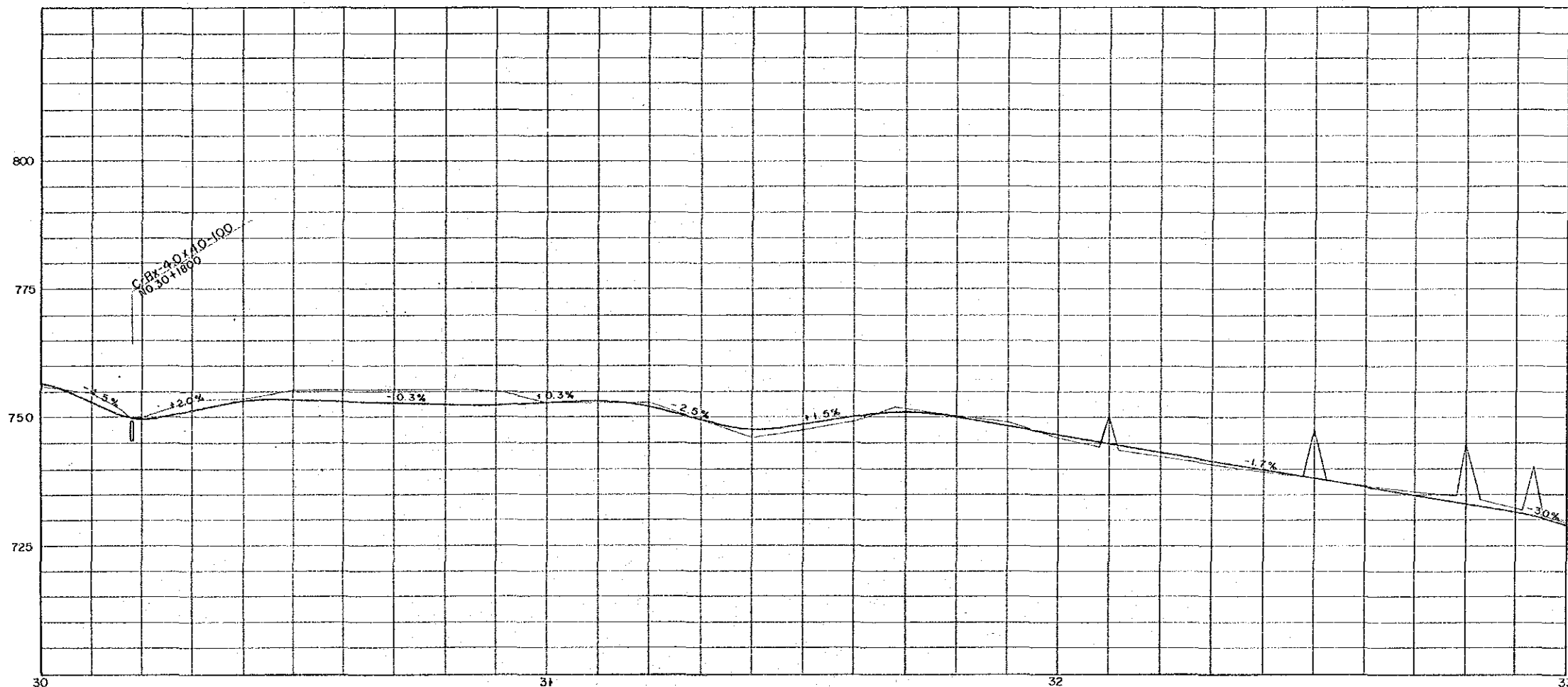


ESCALA  
SCALE: HORIZONTAL 1:5000, VERTICAL 1:200

# PLANTA PLAN (11)

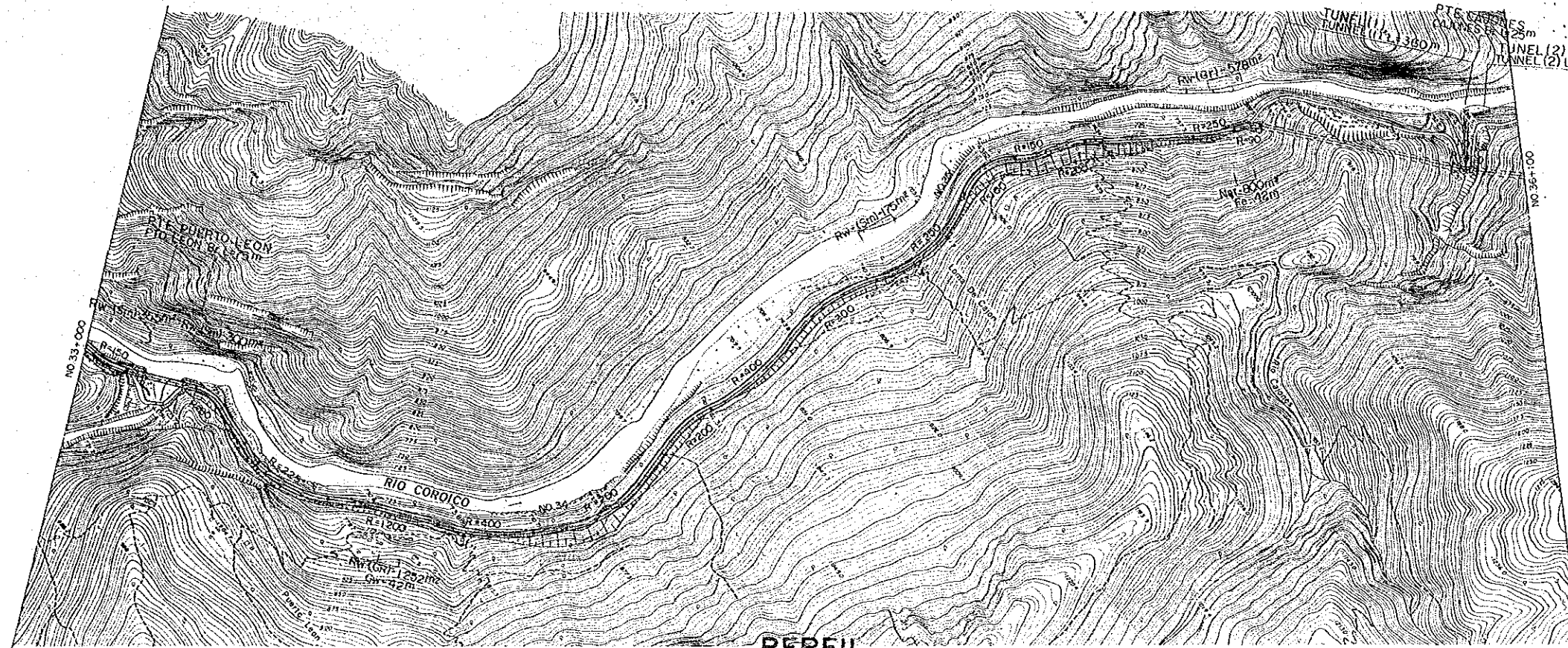


PERFIL  
PROFILE

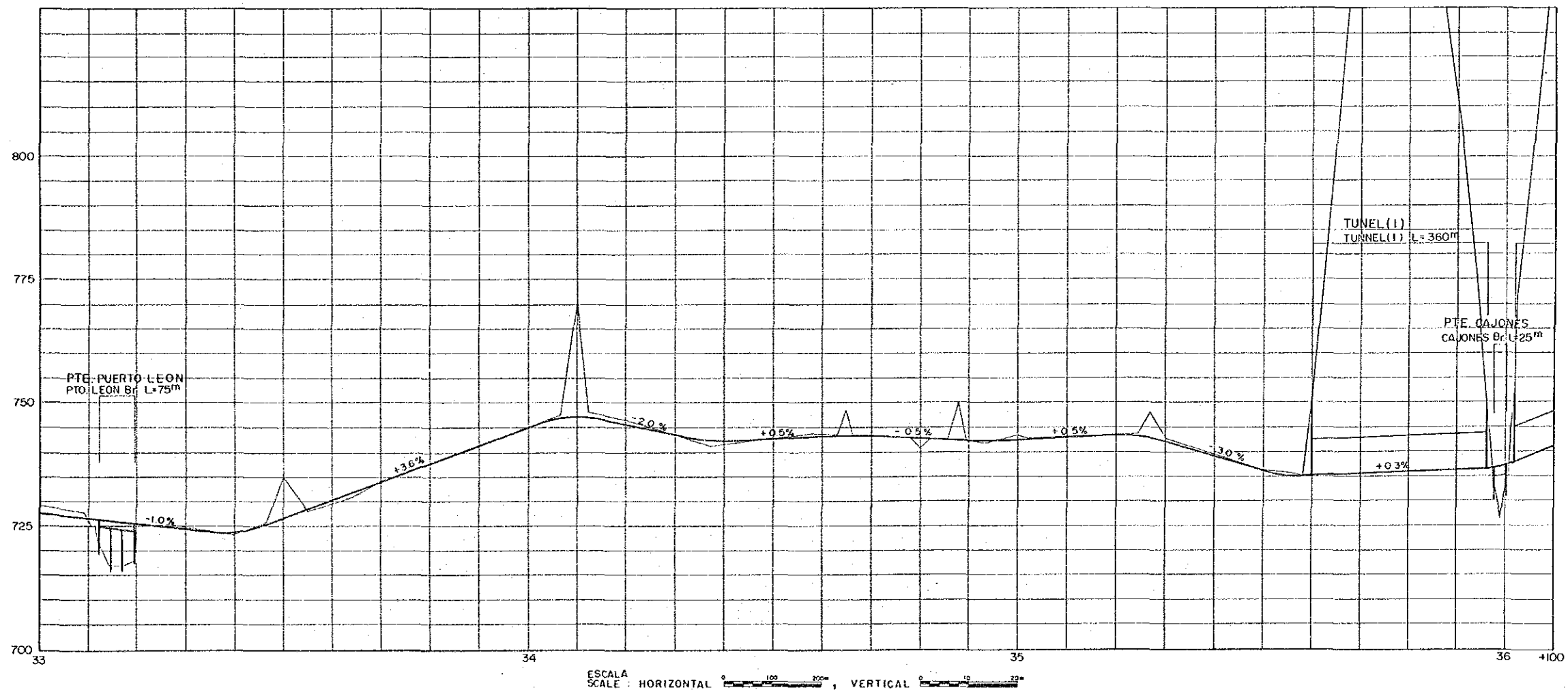


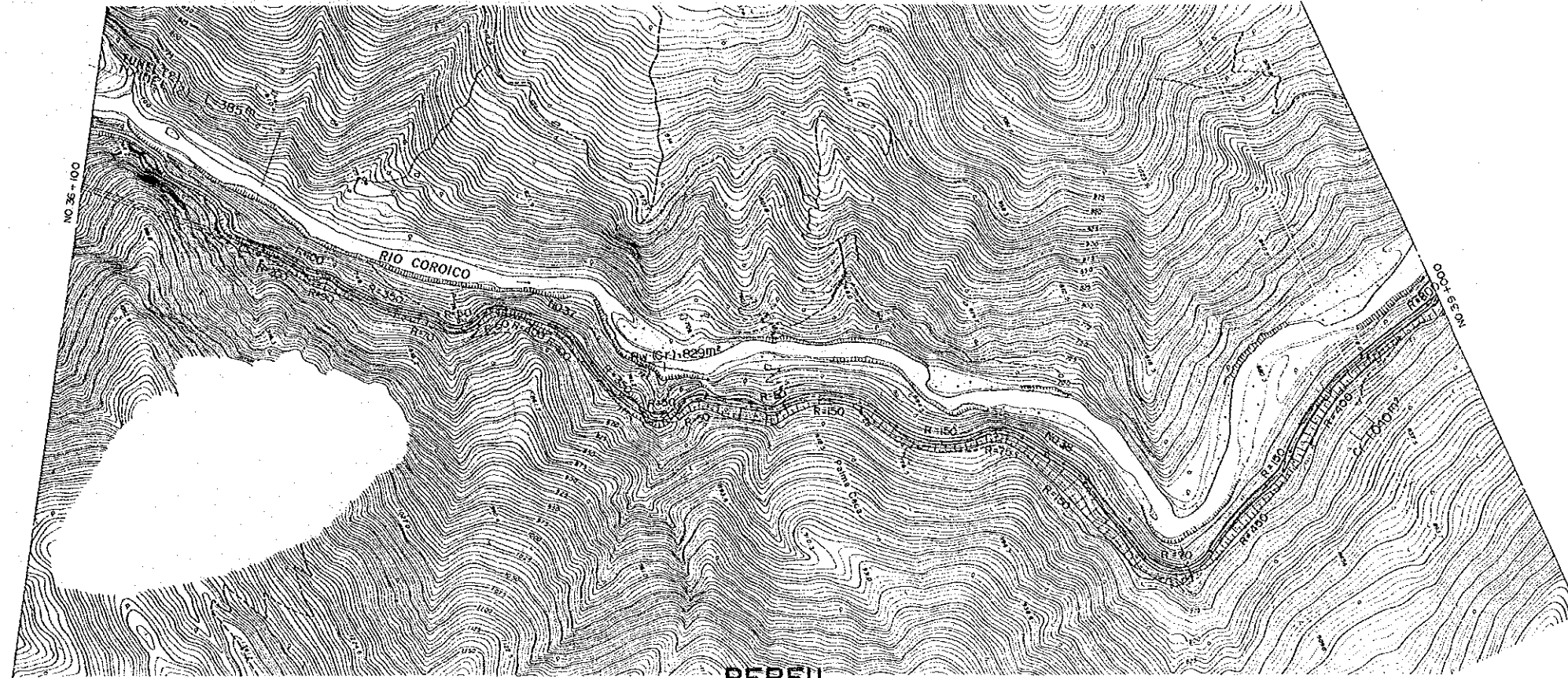
ESCALA  
SCALE: HORIZONTAL 1:2500, VERTICAL 1:500

### PLANTA PLAN (12)

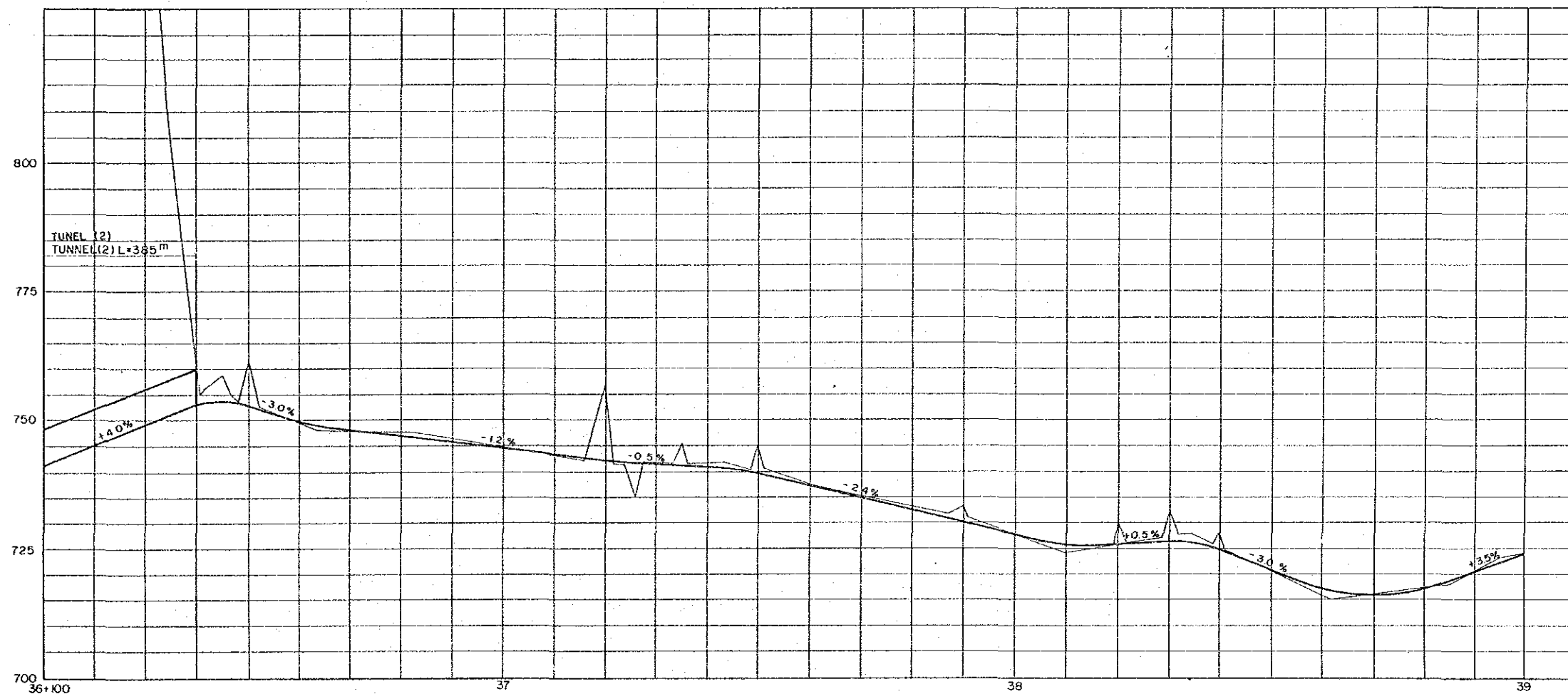


### PERFIL PROFILE



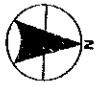
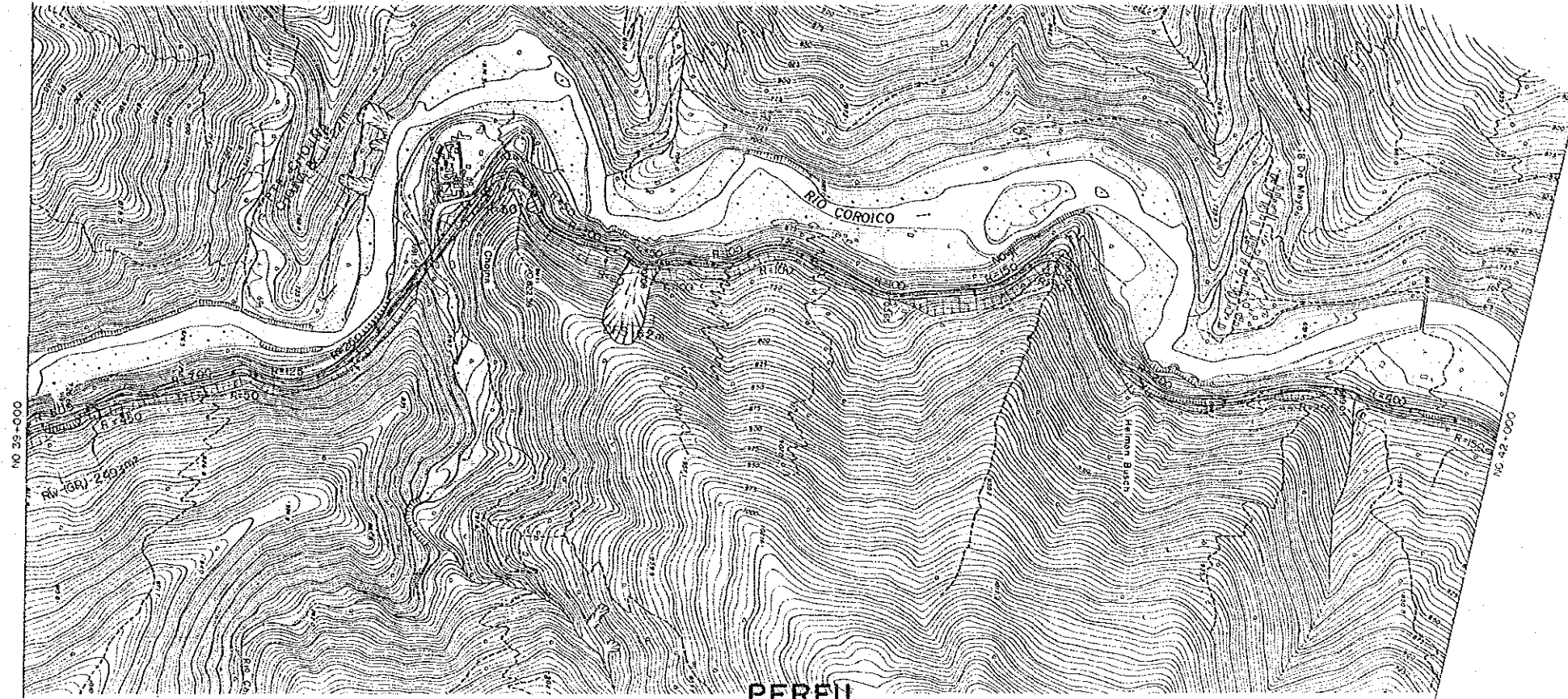


PERFIL  
PROFILE

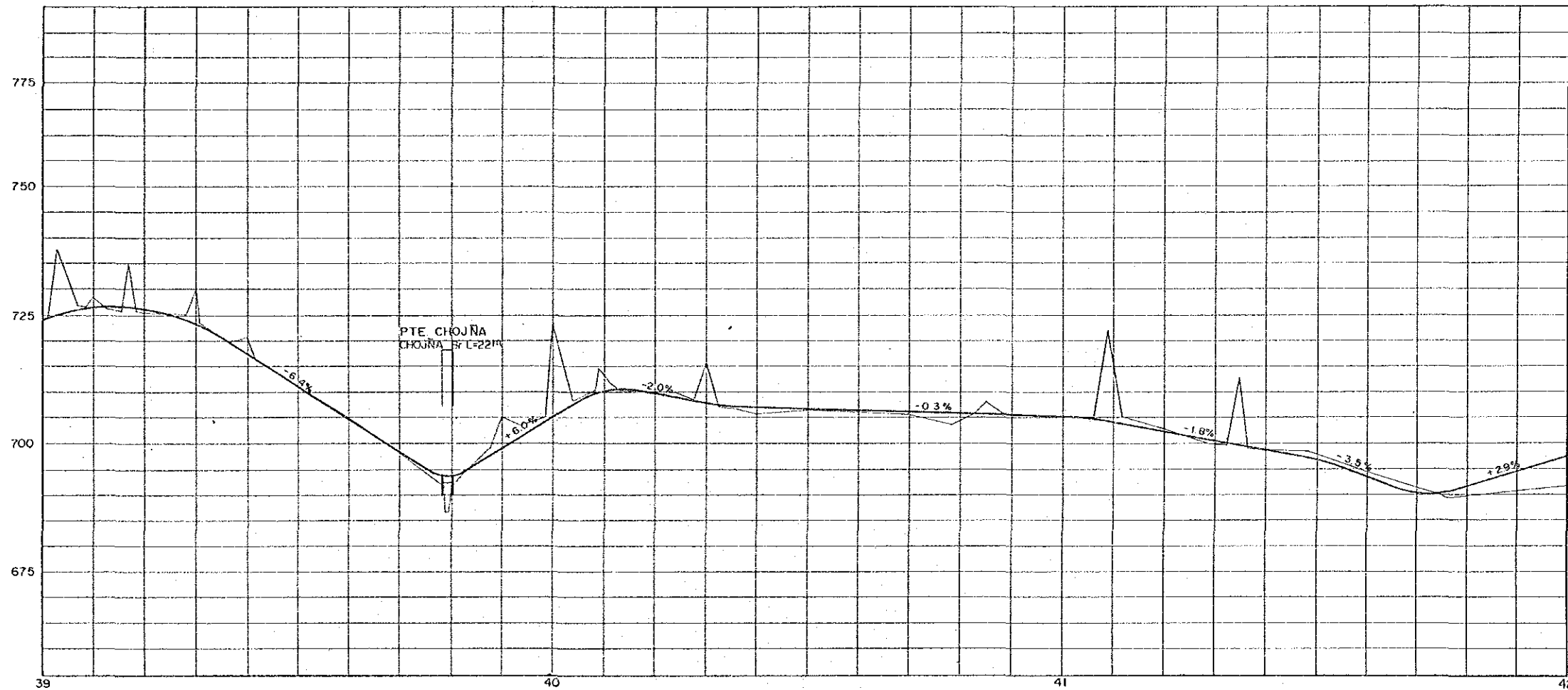


ESCALA  
SCALE: HORIZONTAL 1:2000, VERTICAL 1:100

# PLANTA PLAN (14)



## PERFIL PROFILE



ESCALA  
SCALE : HORIZONTAL 1:2000, VERTICAL 1:20